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PTO/SB/96 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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### STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Oracle International Corporation

Application No./Patent No.: 09/321,594 Filed/Issue Date: May 28, 1999

Entitled: SCHEMA EVOLUTION IN REPLICATION

Oracle International Corporation, a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %  
in the patent application/patent identified above by virtue of either:

A. [ ] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. [x] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Alan J. Demers, Curtis Elsbernd, James William Stamos, Lik Wong To: Oracle Corporation  
The document was recorded in the United States Patent and Trademark Office at Reel 010137, Frame 0474, or for which a copy thereof is attached.
2. From: Oracle Corporation To: Oracle International Corporation  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

[ ] Additional documents in the chain of title are listed on a supplemental sheet.

[ ] Copies of assignments or other documents in the chain of title are attached.  
[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

9/2/05  
Date

[Signature]  
Signature

(408) 414-1201  
Telephone Number

Brian D. Hickman, Reg. No. 35,894  
Typed or printed name  
Attorney for Applicants  
Title



PTO/SB/80 (04-05)

Approved for use through 11/30/2005. OMB 0651-0036  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO**

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

☒ Practitioners associated with the Customer Number:

42425

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

☒ The address associated with Customer Number:

42425

OR

<input type="checkbox"/> Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone	Email		

Assignee Name and Address:

Oracle International Corporation  
500 Oracle Parkway  
Redwood Shores, CA 94065

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

**SIGNATURE of Assignee of Record**

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature	<i>Michael Gelblum</i>	Date	<i>22 August 2005</i>
Name	<i>Michael Gelblum</i>	Telephone	<i>650-506-15875</i>
Title	<i>Managing Counsel</i>		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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12-08-2003

Form PTO-1595  
(Rev. 10/02)  
OMB No. 0651-0027 (exp. 6/30/2005)

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U.S. Patent and Trademark Office

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PATENTS ONLY

Tab settings ⇨⇨⇨

To the honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Oracle Corporation

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other \_\_\_\_\_

Execution Date: 11/13/2003

2. Name and address of receiving party(ies)  
Name: Oracle International Corporation (OIC)

Internal Address: \_\_\_\_\_

Street Address: 500 Oracle Parkway

City: Redwood Shores State: CA Zip: 94065

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

(see attached)

B. Patent No.(s)

(see attached)

Additional numbers attached? ☒ Yes ☐ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Stephen C. Carlson

Ditthavong &amp; Carlson, P.C.

Internal Address: \_\_\_\_\_

Street Address: 10507 Braddock Rd

Suite A

City: Fairfax State: VA Zip: 22032

## 6. Total number of applications and patents involved:

83

## 7. Total fee (37 CFR 3.41). . . . . \$ 3,320.00

☒ Enclosed, Credit Card (83 X \$40.00)☐ Authorized to be charged to deposit account

## 8. Deposit account number: \_\_\_\_\_

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Stephen C. Carlson

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and documents: 13

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

12/05/2003 LUELLER 00000002 5847275

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## Continuation sheet 4A

<b><u>Issued Patents</u></b>	<b><u>Patent Applications</u></b>
<b>Patent No.</b>	<b>Patent Application. No.</b>
5,887,275	09/834,658
5,924,088	10/278,898
5,963,932	09/263,068
5,890,167	10/102,844
6,272,503	09/248,294
6,125,368	09/515,889
5,987,580	09/512,619
5,926,819	09/515,887
5,873,102	09/584,085
6,070,172	09/583,747
5,963,959	09/639,795
6,289,335	09/512,621
5,987,463	09/512,618
6,049,800	09/792,070
5,991,768	09/512,620
6,236,997	09/321,622
6,041,344	10/293,555
6,105,018	09/321,624
6,163,858	09/553,956
6,240,428	09/577,967
6,058,401	09/321,594
6,173,313	09/768,823
6,112,197	09/730,803
6,370,524	09/925,633
6,428,541	09/918,712
6,014,614	09/829,903
6,327,606	10/140,818
6,374,232	09/852,008
6,353,828	09/863,419
6,457,000	09/863,422
6,499,095	10/146,937
6,457,019	10/153,642
6,496,830	10/051,274
6,223,182	10/325,154
6,604,182	
6,161,105	
6,253,226	
6,564,223	
6,377,943	
6,434,685	
6,401,185	
6,529,904	
6,532,479	
6,226,649	
6,631,374	
6,631,386	
6,598,059	
6,557,012	
6,584,476	

**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

**PATENT ASSIGNMENT**

**WHEREAS**, in consideration of good and valuable consideration, the receipt of which is hereby acknowledged, **Oracle Corporation**, a corporation of Delaware, with a place of business at 500 Oracle Parkway, Redwood Shores, California 94065, hereinafter referred to as "**Assignor**," has sold, assigned, transferred and set over, unto **Oracle International Corporation (OIC)**, a corporation of California, with a place of business at 500 Oracle Parkway, Redwood Shores, California 94065, hereinafter referred to as "**Assignee**," its successors, legal representatives and assigns, **Assignor's** entire right, title and interest in, to, and under the issued patents and provisional and non-provisional pending applications listed on the attached Schedule A, as well as any divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for inventions embodied by said pending applications in any country or countries foreign to the United States, and all Letters Patent which may be granted for said inventions embodied by said pending applications in any country or countries foreign to the United States and all extensions, renewals and reissues thereof and all rights of priority in any such country or countries based upon the filing of said pending applications in the United States which are created by any law, treaty or international convention; and **Assignor** hereby authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty is to issue patents on any such applications as aforesaid, to issue all Letters Patent for said inventions to **Oracle International Corporation**, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

**AND** **Assignor** does hereby covenant that it had full right to convey the entire interest herein assigned, and that **Assignor** has not executed, and will not execute, any agreement in conflict herewith.

**AND** **Assignor** does further hereby covenant and agree that it will communicate to said **Assignee**, its successors, legal representatives and assigns, any facts known to it respecting said pending applications, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything reasonably necessary to aid said **Assignee**, its successors, legal representatives and assigns, to obtain and enforce any attendant rights in all countries.

IN WITNESS WHEREOF, Oracle Corporation has caused this instrument to be signed by a duly authorized corporate officer and its corporate seal to be affixed, as of this 13<sup>th</sup> day of November, 2003.

Oracle Corporation

By: 

Name: Daniel Cooperman

Title: Senior Vice President and General Counsel

**Schedule A**  
**Patent Applications**

<b>No</b>	<b>Attorney Docket No.</b>	<b>OIC Docket No.</b>	<b>Appl. No.</b>	<b>Filing Date</b>	<b>Title</b>
✓ 1.	50277-1010	OID-1996-017-10-CON	<del>09/834,658</del>	4/16/2001	IMPORT/EXPORT AND REPARTITIONING OF PARTITIONED OBJECTS
✓ 2.	50277-1059	OID-1997-037-02-CON DIV	<del>10/278,898</del>	10/24/2002	IMPLEMENTING DESCENDING INDEXES WITH A DESCEND FUNCTION
✓ 3.	50277-0164	OID-1997-039-01	<del>09/263,068</del>	3/8/1999	LEXICAL CACHE
✓ 4.	50277-1046	OID-1997-048-01-DIV	<del>10/102,844</del>	3/22/2002	MEMORY MANAGEMENT WITHIN A RUN-TIME ENVIRONMENT
✓ 5.	50277-0179	OID-1997-048-03	<del>09/248,294</del>	2/11/1999	ADDRESS CALCULATION OF INVARIANT REFERENCES WITHIN A RUN-TIME ENVIRONMENT
✓ 6.	50277-0416	OID-1997-048-06	<del>09/515,889</del>	2/29/2000	MEMORY MANAGEMENT USING MIGRATION FOR A RUN-TIME ENVIRONMENT
✓ 7.	50277-0214	OID-1997-048-07	<del>09/512,619</del>	2/25/2000	METHODS FOR MANAGING MEMORY IN A RUN-TIME ENVIRONMENT INCLUDING REGISTRATION OF A DEALLOCATION ROUTINE AT EXPLICIT, LAZY INITIALIZATION (AS AMENDED)
✓ 8.	50277-0417	OID-1997-048-09	<del>09/515,887</del>	2/29/2000	STATIC OBJECT SYSTEM AND METHODOLOGY FOR IMPLEMENTING A RUN-TIME ENVIRONMENT
✓ 9.	50277-0455	OID-1997-048-10	<del>09/584,085</del>	5/31/2000	DIAGNOSTIC TECHNIQUE FOR DEBUGGING MEMORY CORRUPTION
✓ 10.	50277-0450	OID-1997-048-11	<del>09/583,747</del>	5/31/2000	DIAGNOSTIC METHOD AND ARTICLE FOR IDENTIFYING SIGNIFICANT EVENTS
✓ 11.	50277-0451	OID-1997-048-13	<del>09/639,795</del>	8/17/2000	METHOD AND ARTICLE FOR MANAGING REFERENCES BETWEEN OBJECTS IN MEMORIES OF DIFFERENT DURATIONS IN A RUN-TIME ENVIRONMENT
✓ 12.	50277-0258	OID-1997-048-14	<del>09/512,621</del>	2/25/2000	SYSTEM AND METHODOLOGY FOR SUPPORTING A PLATFORM INDEPENDENT OBJECT FORMAT FOR A RUN-TIME ENVIRONMENT
✓ 13.	50277-0259	OID-1997-048-15	<del>09/512,618</del>	2/25/2000	METHOD AND APPARATUS FOR MANAGING SHARED MEMORY IN A RUN-TIME ENVIRONMENT
✓ 14.	50277-0453	OID-1997-048-18	<del>09/792,070</del>	2/26/2001	NATIVE COMPILATION AND SAFE DEPLOYMENT OF VIRTUAL MACHINE CODE
✓ 15.	50277-0403	OID-1997-048-19	<del>09/512,620</del>	2/25/2000	USING A VIRTUAL MACHINE INSTANCE AS THE BASIC UNIT OF USER EXECUTION IN A SERVER ENVIRONMENT
✓ 16.	50277-0329	OID-1997-063-02	<del>09/321,622</del>	5/28/1999	LIGHTWEIGHT DATA REPLICATION
✓ 17.	50277-1060	OID-1999-015-01-DIV	<del>10/293,555</del>	11/14/2002	DEPLOYING PLURALITY OF SNAPSHOTS STORING PARAMETERIZED DATA DESCRIPTION LANGUAGE STRINGS WITH SUBSTITUTABLE PARAMETER (as amended)
✓ 18.	50277-0295	OID-1999-016-01	<del>09/321,624</del>	5/28/1999	DATA REPLICATION SECURITY
✓ 19.	50277-0452	OID-1999-038-01	<del>09/553,956</del>	4/21/2000	SYSTEM AND METHOD FOR GENERATING DECISION TREES
✓ 20.	50277-0456	OID-1999-048-01	<del>09/577,967</del>	5/25/2000	PERSISTENT AGENTS
✓ 21.	50277-0313	OID-1999-059-01	<del>09/321,594</del>	5/28/1999	SCHEMA EVOLUTION IN REPLICATION

✓ 22.	50277-0459	OID-1999-084-01	<del>09/768,823</del>	1/25/2001	ACCESSING SHORTER-DURATION INSTANCES OF ACTIVATABLE OBJECTS BASED ON OBJECT REFERENCES STORED IN LONGER-DURATION MEMORY
✓ 23.	50277-0454	OID-1999-084-02	<del>09/730,803</del>	12/7/2000	HANDLING CALLOUTS MADE BY A MULTI-THREADED VIRTUAL MACHINE TO A SINGLE THREADED ENVIRONMENT
✓ 24.	50277-1048	OID-1999-151-01	<del>09/925,633</del>	8/9/2001	SYSTEM AND METHOD FOR DETERMINING SPATIAL RELATIONSHIPS AMONG GEOMETRICAL OBJECTS IN A SCENE
✓ 25.	50277-1021	OID-2000-117-01	<del>09/918,712</del>	8/1/2001	SYSTEM AND METHOD FOR ONLINE ANALYTICAL PROCESSING
✓ 26.	50277-1004	OID-2000-182-01	<del>09/829,903</del>	4/11/2001	METHOD AND ARTICLE FOR INTERACTIVE DATA EXPLORATION
✓ 27.	50277-1002	OID-2000-190-01	<del>10/140,818</del>	5/9/2002	METHOD AND APPARATUS FOR CHANGE DATA CAPTURE IN A DATABASE SYSTEM
✓ 28.	50277-1003	OID-2000-207-01	<del>09/852,008</del>	5/10/2001	DISASTER RECOVERY WITH BOUNDED DATA LOSS
✓ 29.	50277-1005	OID-2001-003-01	<del>09/863,419</del>	5/24/2001	ASYNCHRONOUS CHANGE CAPTURE FOR DATA WAREHOUSING
✓ 30.	50277-1006	OID-2001-010-01	<del>09/863,422</del>	5/24/2001	SYNCHRONOUS CHANGE DATA CAPTURE IN A RELATIONAL DATABASE
✓ 31.	50277-1014	OID-2001-043-01	<del>10/146,937</del>	5/17/2002	METHOD FOR EXTRACTING ASSOCIATION RULES
✓ 32.	50277-1019	OID-2001-078-01	<del>10/153,642</del>	5/24/2002	DRIVER AND METHOD FOR PROCESSING A DATABASE STATEMENT
✓ 33.	50277-1020	OID-2001-079-01	<del>10/051,274</del>	1/22/2002	METHOD AND SOFTWARE FOR PROCESSING SERVER PAGES
✓ 34.	50277-1038	OID-2002-037-01	<del>10/325,154</del>	12/20/2002	APPLICATION PLATFORM USER INTERFACE



**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

**PATENT ASSIGNMENT**

**WHEREAS**, in consideration of good and valuable consideration, the receipt of which is hereby acknowledged, **Oracle Corporation**, a corporation of Delaware, with a place of business at 500 Oracle Parkway, Redwood Shores, California 94065, hereinafter referred to as "**Assignor**," has sold, assigned, transferred and set over, unto **Oracle International Corporation (OIC)**, a corporation of California, with a place of business at 500 Oracle Parkway, Redwood Shores, California 94065, hereinafter referred to as "**Assignee**," its successors, legal representatives and assigns, **Assignor's** entire right, title and interest in, to, and under the issued patents and provisional and non-provisional pending applications listed on the attached Schedule A, as well as any divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for inventions embodied by said pending applications in any country or countries foreign to the United States, and all Letters Patent which may be granted for said inventions embodied by said pending applications in any country or countries foreign to the United States and all extensions, renewals and reissues thereof and all rights of priority in any such country or countries based upon the filing of said pending applications in the United States which are created by any law, treaty or international convention; and **Assignor** hereby authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty is to issue patents on any such applications as aforesaid, to issue all Letters Patent for said inventions to **Oracle International Corporation**, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

**AND** **Assignor** does hereby covenant that it had full right to convey the entire interest herein assigned, and that **Assignor** has not executed, and will not execute, any agreement in conflict herewith.

**AND** **Assignor** does further hereby covenant and agree that it will communicate to said **Assignee**, its successors, legal representatives and assigns, any facts known to it respecting said pending applications, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything reasonably necessary to aid said **Assignee**, its successors, legal representatives and assigns, to obtain and enforce any attendant rights in all countries.

IN WITNESS WHEREOF, Oracle Corporation has caused this instrument to be signed by a duly authorized corporate officer and its corporate seal to be affixed, as of this 13<sup>th</sup> day of November, 2003.

**Oracle Corporation**

By:

*Daniel Cooperman*

Name: Daniel Cooperman

Title: Senior Vice President and General Counsel

**Schedule A**  
**Issued Patents**

<u>No</u>	<u>Attorney Docket No.</u>	<u>OIC Docket No.</u>	<u>Patent No.</u>	<u>Issue Date</u>	<u>Serial No.</u>	<u>Filing Date</u>	<u>Title</u>
✓1	50277-0038	OID-1995-026-01	5,887,275	3/23/1999	08/598,517	2/8/1996	METHOD AND APPARATUS FOR LOCATING A FIRST SET OF DATA USING A GLOBAL IDENTIFIER AND A VIRTUAL ADDRESSING DATA STRUCTURE
✓2	50277-0052	OID-1996-017-85	5,924,088	7/13/1999	<del>08/808,094</del>	2/28/1997	INDEX SELECTION FOR AN INDEX ACCESS PATH
✓3	50277-0053	OID-1996-017-86	5,963,932	10/5/1999	<del>08/806,520</del>	4/29/1997	METHOD AND APPARATUS FOR TRANSFORMING QUERIES
✓4	50277-0077	OID-1996-036-02	5,890,167	3/30/1999	<del>08/852,968</del>	5/8/1997	PLUGGABLE TABLESPACES FOR DATABASE SYSTEMS
✓5	50277-0078	OID-1996-036-01	6,272,503	8/7/2001	<del>08/865,693</del>	5/30/1997	TABLESPACE-RELATIVE DATABASE POINTERS
✓6	50277-0079	OID-1996-036-03	<del>6,125,368</del>	9/26/2000	<del>08/808,582</del>	2/28/1997	FAULT-TOLERANT TIMESTAMP GENERATION FOR MULTI-NODE PARALLEL DATABASES
✓7	50277-0082	OID-1996-017-93	5,987,580	11/16/1999	<del>08/835,160</del>	4/4/1997	SERIALLY REUSABLE EXECUTION MEMORY
✓8	50277-0088	OID-1996-002-08	5,926,819	7/20/1999	<del>08/866,823</del>	5/30/1997	IN-LINE TRIGGERS
✓9	50277-0094	OID-1996-036-04	5,873,102	2/13/1999	<del>08/846,511</del>	4/29/1997	PLUGGABLE TABLESPACE ON A TRANSPORTABLE MEDIUM
10	50277-0094	OID-1996-047-01 closed	6,070,172	5/30/2000	<del>08/813,811</del>	3/6/1997	PLUGGABLE TABLESPACE ON A TRANSPORTABLE MEDIUM
✓11	50277-0095	OID-1996-002-10	5,963,959	10/5/1999	<del>08/865,645</del>	5/30/1997	FAST REFRESH OF SNAPSHOTS
✓12	50277-0096	OID-1996-002-01	6,289,335	9/11/2001	08/880,928	6/23/1997	FAST REFRESH OF SNAPSHOT CONTAINING SUBQUERIES
✓13	50277-0097	OID-1996-002-11	5,987,463	11/16/1999	08/880,326	6/23/1997	APPARATUS AND METHOD FOR CALLING EXTERNAL ROUTINES IN A DATABASE SYSTEM
✓14	50277-0098	OID-1996-002-11-CIP	6,049,800	4/11/2000	<del>08/962,537</del>	10/31/1997	MECHANISM AND METHOD FOR PERFORMING CALLBACKS

<u>No</u>	<u>Attorney Docket No.</u>	<u>OIC Docket No.</u>	<u>Patent No.</u>	<u>Issue Date</u>	<u>Serial No.</u>	<u>Filing Date</u>	<u>Title</u>
✓15	50277-0099	OID-1996-002-04 - CIP	5,991,768	11/23/1999	08/865,818	5/30/1997	FINER GRAINED QUIESCENCE FOR DATA REPLICATION
✓16	50277-0101	OID-1996-002-09	6,236,997	5/22/2001	08/880,333	6/23/1997	APPARATUS AND METHOD FOR ACCESSING FOREIGN DATABASES IN A HETEROGENOUS DATABASE SYSTEM
✓17	50277-0103	OID-1996-002-16	6,041,344	3/21/2000	08/880,325	6/23/1997	APPARATUS AND METHOD FOR PASSING STATEMENTS TO FOREIGN DATABASES BY USING A VIRTUAL PACKAGE
✓18	50277-0106	OID-1997-007-07	6,105,018	8/15/2000	09/049,285	3/26/1998	MINIMUM LEAF SPANNING TREE
✓19	50277-0137	OID-1997-028-01	6,163,858	12/19/2000	09/092,856	6/8/1998	DIAGNOSTIC METHODOLOGY FOR DEBUGGING INTEGRATED SOFTWARE
✓20	50277-0147	OID-1996-017-10	6,240,428	5/29/2001	08/961,779	10/31/1997	IMPORT/ EXPORT AND REPARTITION OF PARTITIONED OBJECTS
✓21	50277-0150	OID-1997-007-01	6,058,401	5/2/2000	09/081,297	5/20/1998	METHOD FOR DATA REPLICATION WITH CONFLICT DETECTION
✓22	50277-0154	OID-1997-006-02	6,173,313	1/9/2001	09/103,546	6/24/1998	METHODOLOGY FOR HOSTING DISTRIBUTED OBJECTS AT A PREDETERMINED NODE IN A DISTRIBUTED SYSTEM
✓23	50277-0159	OID-1997-031-01	6,112,197	8/29/2000	09/086,753	5/29/1998	METHOD AND APPARATUS FOR TRANSMISSION OF ROW DIFFERENCES
✓24	50277-0161	OID-1997-036-01	6,370,524	4/9/2002	09/283,755	4/2/1999	SYSTEM AND METHOD FOR PROCESSING QUERIES HAVING AN INNER QUERY BLOCK CONTAINING A GROUPING OPERATOR
✓25	50277-0162	OID-1997-036-02	6,428,541	8/20/2002	09/246,722	2/9/1999	METHOD AND ARTICLE FOR PROCESSING QUERIES THAT DEFINE OUTER JOINED VIEWS

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✓26	50277-165	OID-1997-035-01	6,014,614	1/11/2000	09/086,499	5/29/1998	METHOD AND MECHANISM FOR PERFORMING SPATIAL JOINS
✓27	50277-0166	OID-1997-044-01	6,327,606	12/4/2001	09/103,548	6/24/1998	MEMORY MANAGEMENT OF COMPLEX OBJECTS RETURNED FROM PROCEDURE CALLS
✓28	50277-0167	OID-1995-056-19-CIP	6,374,232	4/16/2002	09/403,549	6/24/1998	METHOD AND MECHANISM FOR RETRIEVING DATA FROM A DATABASE INDEX OR AN INDEX-ORGANIZED TABLE
✓29	50277-0168	OID-1997-011-06	6,353,828	3/5/2002	09/311,273	5/14/1999	CONCURRENCY CONTROL FOR MAINTENANCE OF MATERIALIZED VIEWS
✓30	50277-0169	OID-1997-038-01	6,457,000	9/24/2002	09/363,996	7/29/1999	METHOD AND APPARATUS FOR ACCESSING PREVIOUS ROWS OF DATA IN A TABLE
✓31	50277-0172	OID-1997-048-02	6,499,095	12/24/2002	09/248,291	2/11/1999	MACHINE-INDEPENDENT MEMORY MANAGEMENT SYSTEM WITHIN A RUN-TIME ENVIRONMENT
✓32	50277-0178	OID-1997-048-01	6,457,019	9/24/2002	09/248,295	2/11/1999	MEMORY MANAGEMENT WITHIN A RUN-TIME ENVIRONMENT
✓33	50277-0200	OID-1997-037-02	6,496,830	12/17/2002	09/330,071	6/11/1999	IMPLEMENTING DESCENDING INDEXES WITH A DESCEND FUNCTION
✓34	50277-0212	OID-1997-035-03	6,223,182	4/24/2001	09/106,448	6/30/1998	DYNAMIC DATA ORGANIZATION
✓35	50277-0213	OID-1997-048-08	6,604,182	8/5/2003	09/512,622	2/25/2000	METHOD FOR MANAGING MEMORY USING ACTIVATION-DRIVEN INITIALIZATION IN A RUN-TIME ENVIRONMENT
✓36	50277-0220	OID-1994-006-01-CON	6,161,105	12/12/2000	08/827,987	10/2/1996	METHOD AND APPARATUS FOR MULTIDIMENSIONAL DATABASE USING BINARY HYPERSPATIAL CODE

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✓ 37	50277-0227	OID-1997-044-02	6,253,226	6/26/2001	<del>09/403,547</del>	6/24/1998	DURATION-BASED MEMORY MANAGEMENT OF COMPLEX OBJECTS
✓ 38	50277-0230	OID-1997-048-12	6,564,223	5/13/2003	<del>09/408,847</del>	9/30/1999	METHOD AND ARTICLE FOR MANAGING REFERENCES TO EXTERNAL OBJECTS IN A RUNTIME ENVIRONMENT
✓ 39	50277-0231	OID-1998-007-01	6,377,943	5/2/2000	09/081,297	5/20/1998	METHOD FOR DATA REPLICATION WITH CONFLICT DETECTION
✓ 40	50277-0261	OID-1997-048-17	6,434,685	8/13/2002	<del>09/248,297</del>	2/11/1999	PAGED MEMORY MANAGEMENT SYSTEM WITHIN A RUN-TIME ENVIRONMENT
✓ 41	50277-0293	OID-1998-034-01	6,401,185	6/4/2002	<del>09/320,578</del>	5/27/1999	METHOD AND ARTICLE FOR ACCESSING SLOTS OF PAGED OBJECTS
✓ 42	50277-0296	OID-1999-015-01	6,529,904	3/4/2003	<del>09/321,625</del>	5/28/1999	DEPLOYMENT OF SNAPSHOTS WITH PARAMETERIZED DATA DESCRIPTION LANGUAGE STRINGS
✓ 43	50277-0328	OID-1997-063-01	6,532,479	3/11/2003	<del>09/322,153</del>	5/28/1999	DATA REPLICATION FOR FRONT OFFICE AUTOMATION
✓ 44	50277-0360	OID-1996-002-15-CON	6,226,649	5/1/2001	09/390,028	9/3/1999	APPARATUS AND METHOD FOR TRANSPARENT ACCESS OF FOREIGN DATABASES IN A HETEROGENEOUS DATABASE SYSTEM
✓ 45	50277-1024	OID-2000-133-01	6,631,374	10/7/2003	<del>09/976,305</del>	9/29/2000	SYSTEM AND METHOD FOR PROVIDING FINE- GRAINED TEMPORAL DATABASE ACCESS
✓ 46	50277-1049	OID-1999-164-01	6,631,386	10/7/2003	09/557,923	4/22/2000	DATABASE VERSION CONTROL SUBSYSTEM AND METHOD FOR USE WITH DATABASE MANAGEMENT SYSTEM

<b>No</b>	<b><u>Attorney</u> <u>Docket No.</u></b>	<b><u>OIC Bucket No.</u></b>	<b><u>Patent</u> <u>No.</u></b>	<b><u>Issue Date</u></b>	<b><u>Serial No.</u></b>	<b><u>Filing Date</u></b>	<b><u>Title</u></b>
✓47	50277-1050	OID-1999-164-02	6,598,059	7/22/2003	<del>09/557,590</del>	4/22/2000	SYSTEM AND METHOD OF IDENTIFYING AND RESOLVING CONFLICTS AMONG VERSIONS OF A DATABASE TABLE
✓48	50277-1051	OID-1999-164-03	6,557,012	4/29/2003	<del>09/557,591</del>	4/22/2000	SYSTEM AND METHOD OF REFRESHING AND POSTING DATA BETWEEN VERSIONS OF A DATABASE TABLE
✓49	50277-1052	OID-1999-164-04	6,584,476	6/24/2003	<del>09/557,592</del>	4/22/2000	SYSTEM AND METHOD FOR ENFORCING REFERENTIAL CONSTRAINTS BETWEEN VERSIONED DATABASE TABLES